



State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT
Acting Division Director

JON M. HUNTSMAN, JR.
Governor

I
GARY R. HERBERT
Lieutenant Governor

May 5, 2005

CERTIFIED RETURN RECEIPT
7002 0510 0003 8603 3509

Thomas P. Mathison
Shaw Environmental & Infrastructure, Inc.
2790 Mosside Boulevard
Monroeville, Pennsylvania 15146

Subject: Initial Review of Notice of Intention to Commence Large Mining Operations,
Shaw Environmental, Lime Peak Quarry, M/049/047, Utah County, Utah

Dear Mr. Mathison:

The Division has completed our review of your draft Notice of Intention to Commence Large Mining Operations for the Lime Peak quarry, located in Utah County, Utah, which was received March 21, 2005. The attached comments will need to be addressed before tentative approval may be granted.

Comments are listed under the applicable Minerals Rule heading. Please format your response in a similar fashion, and **address only those items requested in the attached technical review**. Send replacement pages of the original mining notice using redline and strikeout text, so we can see what changes have been made. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you send us two clean copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records. Please provide a response to this review by June 6, 2005.

The Division will suspend further review of the Lime Peak Quarry Notice of Intention until your response to this letter is received. If you have any questions in this regard contact Lynn Kunzler at (801) 538-5310 of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

Susan M. White
Mining Program Coordinator
Minerals Regulatory Program

SMW:LK:jb
Attachment: Review

REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

**Shaw Environmental & Infrastructure, Inc
Lime Peak Quarry**

**M/049/047
May 5, 2005**

R647-4-104 - Operator's, Surface and Mineral Ownership

The application indicates the Quest Capitol Corporation is the only adjacent landowner. Figure 1 – Base Map shows that the United States of America is also an adjacent landowner. Please correct this oversight in the notice and identify which federal agency controls these adjacent sections of land. (DJ)

R647-4-105 - Maps, Drawings & Photographs

105.1 Topographic base map, boundaries, pre-act disturbance

In order to verify the location of the operation, section numbers should be included on Figure 1 Base Map. (DJ)

105.2 Surface facilities map

Please provide maps of each area at a scale of 1" = 200' or larger. The reclamation map should show areas that will receive different reclamation treatments (i.e. different soil replacement depths, grading, etc.). (DJ)

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Please provide typical cross sections of all pads, dumps, waste piles, etc. A minimum of two sections (at a 90 degree angle) must be provided for each area. (DJ)

R647-4-106 - Operation Plan

106.2 Type of operations conducted, mining method, processing etc

In paragraph two of this section under Quarry Operations a statement is made that "Based on previous quarrying operations at the Lime Peak Quarry, it is estimated that 20% of the blasted rock will be waste rock". Under section 106.4 the plan states that 10% of the material quarried will be waste material. Please explain the differences between these two statements and adjust waste production figures, if necessary. (DJ)

106.3 Nature of materials mined, waste and estimated tonnages

The application states that the mineralized areas encountered during mining will be avoided or this mineralized material will be considered waste and be left in the quarry waste dump. What is the nature of the mineralization in the material that will be left in the waste dump? Will there be a potential for acid rock drainage (ARD) or off site contamination resulting from leaching of these minerals from this material? Even if these

mineralized areas are avoided during mining as noted, is there be a possibility that exposure of this material will subject adjacent areas to degradation? (DJ)

The plan states fines generated during processing operations will be placed in the quarry waste pile. Fines located at the process facility will have to be hauled to the waste pile located in the quarry area. The cost for the relocation of the fines should be included in the surety (estimated tonnage will be needed for surety calculation purposes). (DJ)

106.6 Plan for protecting & redepositing soils

The application indicates a thickness of soil at this site of 12 inches over 7.6 acres would produce 12,250 cubic yards of soil. Soil was removed from the initial five acre area which was covered under a small mine permit through our Division. Soil was also required to be harvested from this five-acre area prior to the start-up of the process and stockpiling operation. The quantity of soil harvested (approximately 8050 cubic yards) from this previous activity should be included in the total cubic yards of soil available for use during the reclamation of this area. (LK)

The plan states that the topsoil stockpile will be sprayed with magnesium chloride to control erosion. Please note, applying salts (magnesium chloride) to the topsoil is not an acceptable method to protect the soil. Please provide an acceptable method to stabilize topsoil stockpiles such as mulches, tackifiers, or seeding with quick-growing species (preferred). (LK)

106.7 Existing vegetation - species and amount

The Notice provides preliminary vegetation data, with ground cover ranging from 40 to 60 %. Actual percentages will be provided after the 'spring green-up' in 2005. It is recommended that this data be collected during late May to Mid June. (LK)

R647-4-107 - Operation Practices

107.4 Deleterious material safely stored or removed

The containment around the fueling station will be designed to "...contain, at a minimum, the volume of any fixed fuel containers located in the fueling station. Please note, the secondary containment structures must be designed to contain a minimum of 110% of the volume of all the fuel containers in the area. (LK)

107.5 Suitable soils removed & stored

Please refer to comments under R647-4-106.6. (LK)

R647-4-110 - Reclamation Plan

110.1 Current & post mining land use

Even though the lands may not appear to have had any use other than historic mining, most undeveloped lands in Utah provide limited grazing and wildlife habitat. Unless the landowner is desirous for a different land use, (subject to the Division approving an

alternative post mining land use), plan to reclaim the site for limited grazing and wildlife habitat. (LK)

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

The scheduled reclamation plan for the roads is for the roads to be ripped with a dozer, soil replaced, graded, scarified and seeded.

The Division recommends that the roads located on the flatter portions of the site follow this order: replace 12" of topsoil, rip a minimum of 2 feet to remove compaction, and seed. The Division discourages any regrading of roads after ripping, instead we advocate leaving the surfaces in a roughened condition, with the entrances and exits to be blocked with rocks or berms. (DJ)

Any roads that have been constructed in steeper areas where side cast material are present will need to be reclaimed utilizing a trackhoe to bring the displaced material back onto the road surface. An inventory of the each class of road (flat or sidecast) will need to be included in the plan for bonding purposes. (DJ)

Because of the compaction of the process area ripping of the site to a minimum depth of 2 feet is recommended before the placement of soil and amendments. After topsoil is replaced, rip a second time to a depth of a minimum of 6" below the topsoil prior to seeding. (DJ)

This section of the plan states the proposed operation does not include the use of impoundments and that natural drainages will not be impacted. Yet the plan states a rock check dam will be placed in an ephemeral drainage downgradient of the proposed permitted area, and the surety calculation reflects an amount for drainage reconstruction. Please clarify. (DJ)

110.5 Revegetation planting program

This section of the plan again refers to 'smooth grade' before seeding. The Division has found that 'smooth grading' is an apparent inhibitor to establishment of vegetation. Please consider leaving the areas to be seeded in a 'roughed' condition. (LK)

Provide a seed mix for revegetation. This mix should be developed to meet a post-mining land use of limited grazing and wildlife habitat. (LK)

The seeding plan indicates that seeding would only occur during times favorable for successful vegetation establishment. This should be done in late fall (October). (LK)

The plan does not specify how seeding will be done. It is recommended that areas be either drill seeded or broadcast seeded (hydro-seeding of areas that would not be irrigated is not recommended). (LK)

Section 3.2.4.3 Field Area Debris - indicates that debris and stones over 1.5 inches in diameter will be removed. Please don't. In wild-land situations, natural debris (tree

limbs, branches) and larger rock may provide and enhancement for vegetation establishment and wildlife habitat. (LK)

R647-4-113 - Surety

The surety as submitted cannot be authenticated due to the fact that quantities of materials are not shown. For example:

1. A dollar amount is shown for the clean up and removal of structures for the quarry and processing areas. What structures will have to be removed for this amount?
2. An amount is shown for backfilling, grading and contouring. Describe the amount of material that will be needed and where this activity will take place.
3. Under soil redistribution and stabilization, what is the quantity of soil being redistributed and what equipment is being used to redistribute it? What is being done to stabilize the soil?
7. An activity is shown for the regrading, ripping of waste dump tops and slopes. Please include cross-sections in the plan that shows the dump surfaces before and after regrading (refer to R647-4-105.3). These will be needed for the Division to verify quantities of material moved for the amount shown in the surety.
9. The surety indicates that the quarry floors will not be ripped but an amount is shown for mulching, fertilizing and seeding of the quarry area. Quarry floors and other accessible quarry areas should be ripped before the seeding activity. The Division realizes portions of the quarry floor could be solid rock but there will be areas of the floor that carry enough fines that may allow for some germination of seeding.
10. The plan states the no natural drainages will be impacted by this operation. Yet the surety shows monies for drainage reconstruction in the process area. Please explain.
11. Surety amounts are shown for mulching, fertilizing and seeding. Please separate each of the activities (mulching, fertilizing, seeding, etc.) to allow for the evaluation of each of these cost figures separately in the surety.
14. The surety estimate shows a total amount for equipment mobilization of \$1500. Please indicate what equipment will be mobilized to complete reclamation.
15. The figure used by Division to calculate supervision costs is 10% of the total reclamation estimate. (DJ)